

Appl. No. 10/816,015
Amdt. Dated June 28, 2006
Reply to Advisory Action of May 30, 2006

REMARKS/ARGUMENTS

This RCE is responsive to the Advisory Action dated May 30, 2006 and the Final Office Action mailed on March 09, 2006. In the Advisory Action claims 1-44 were rejected.

Claims 1, 15, 17, 18, 23-27, 29, 30, 35-37, 39-41, 43, and 44 were rejected under 35 U.S.C. §102 (b) as being anticipated by Burke et al. (U.S. Patent No. 5,305,363, hereinafter "Burke").

Claims 2, 5, 8-10, 38, and 42 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Burke in view of Richey et al. (U.S. Patent No. 4, 547, 892, hereinafter "Richey"). Claims 3, 4, 12-14, 16, and 28 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Burke and Richey in view of Price et al. (U.S. Patent No. 2002/0085674). Claims 6, 11, 19, 31 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Burke, Richey in view of Zunick (U.S. Patent No. 2, 340, 500, hereinafter "Zunick"). Claims 7, 20, and 32 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Burke, Richey, Price and Zunick. Claims 21 and 33 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Burke, Zunick, in view of Dawson et al. (U.S. Patent No. 5,467,377, hereinafter "Dawson"). Claims 22 and 34 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Burke, Zunick, and Dawson.

Claims 1-44 remain pending.

Claims define allowable subject matter over the applied art

The independent claims 1, 37, and 41 were rejected under 35 U.S.C. §102 (b) over Burke. Claims 1, 37, and 41 have been amended to define subject matter more clearly. Applicants respectfully traverse the rejection of independent amended claims 1, 37, and 41, under 35 U.S.C. §102 (b) as being anticipated by Burke. To anticipate a claim under 102, each and every element of the claim must be taught by the reference.

Applicants maintain that Burke does not disclose, teach or suggest the claim recitations of **"a source controller for triggering one or more emitters in the one or more distributed X-ray sources at each instant in time of an image acquisition for creating multiple projections for acquiring volumetric data by the one or more detectors"**, as recited in amended independent claims 1, 37, and 41 (emphasis added).

Examiner in the Advisory Action has again referred to Col 3, lines 1-8 and Col. 3, lines 47-52 as a teaching for the source controller for triggering one or more emitters.

The text from Col 3, lines 1-8, in Burke states that:

Appl. No. 10/816,015
Amdt. Dated June 28, 2006
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In accordance with another more limited aspect of the present invention, the cathode assembly includes a multiplicity of electron emitting means arranged in an angular ring within the housing. **The electron beam moving means includes means for selectively causing each of the electron emitting means to emit a beam of electrons which impact the anode surface to generate the x-ray beam. (emphasis added)**

The text from Col. 3, lines 47-52, in Burke states that:

In accordance with another more limited aspect of the present invention, **a means is provided for controlling the electron emitting means** such that the generated beam of x-rays has one of at least two selectable different energies. (emphasis added)

Applicants respectfully submit that above highlighted recitations do not disclose, teach or suggest the recitation of **"a source controller for triggering one or more emitters "** or the recitation of **"at each instant in time of an image acquisition for creating multiple projections"** as recited in amended independent claims. Applicants respectfully disagree with the Examiner's conclusion of "electron beam moving means" of Burke as the "source controller" as recited in independent claims of Applicants' application. The Examiner further uses Applicants argument to conclude that cathode structure as mentioned in col. 8, lines 20-25 in Burke as a reading for source controller.

Applicants would like to clarify that they had meant to refer to the cathode structure as a "source" for generating electrons and not as a "source controller". As it would be evident to those skilled in the art, cathode in itself is used as a generation device for electrons. Applicants agree that the use of language may not have been clear in the Final Office Action Response. Burke merely provides an additional cathode structure to heat the filament or the electron emitter. There is absolutely no aspect of any "control" associated with this structure as is clear from the text below from col. 8, lines 20-25 in Burke:

An additional refinement may be obtained by heating the filament or, more generally, the electron emitter by **a second cathode structure** behind the emitter and accelerated by a more modest potential and **a locally controlled grid** in a similar manner to the main cathode structure. (Emphasis Added)

Applicants submit that the recitations of **"a source controller for triggering one or more emitters"** and **"at each instant in time of an image acquisition for creating multiple projections"** as recited in amended independent claims 1, 37 and 41 are adequately supported in the specification, e.g., in paragraph [0022] of the Applicants specification:

System controller 22 generally regulates the operation of the radiation source controller 16, the table controller 18 and the data acquisition controller 20. The system controller 22 may thus cause **radiation source controller 16 to trigger emission of X-ray**

Appl. No. 10/816,015
Amdt. Dated June 28, 2006
Reply to Advisory Action of May 30, 2006

radiation, as well as to coordinate such emissions during imaging sequences defined by the system controller. (Emphasis added)

And similar recitations in paragraph [0026].

As shown in Fig. 2, in an exemplary implementation, the distributed X-ray source 30 may include **a series of electron beam emitters 32 that are coupled to radiation source controller 16** shown in Fig. 1, and **are triggered by the source controller** during operation of the scanner.

Thus the Applicants respectfully submit that the independent claims 1, 37, and 41, are not anticipated by Burke under 35 U.S.C. §102 and therefore, are allowable. Claims 15, 17, 18, 23-27, 29, 30, 35- 36 depend directly or indirectly from claim 1, claims 39-40, depend from claim 37, and claims 43 and 44 depend on claim 41. These dependent claims are similarly allowable.

In view of the foregoing remarks, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. §102 (b).

Under 35 U.S.C. §103 (a) rejections different sets of claims as summarized above have been rejected over at least Burke in view of Richey; Burke and Richey in view of Price; Burke, Richey in view of Zunick; Burke, Richey, Price and Zunick; and Burke, Zunick, in view of Dawson.

Irrespective of what the secondary references teach or do not teach, they still do not overcome the deficiencies of Burke with respect to **"source controller for triggering one or more emitters"** and **"at each instant in time for creating multiple projections"**, as recited in amended independent claims 1, 37 and 41.

Applicants further submit that all the three independent claims 1, 37 and 41 have been distinguished with respect to Burke when discussing 102 rejections above. Each of claims 2-36 depends from claim 1, each of claims 38-40, depends from claim 37, and each of claims 42-44 depends from claim 41. Applicants believe that claims 1, 37, and 41 are in condition for allowance over Burke for the reasons discussed above, regardless of what the other references teach or do not teach.

In view of the foregoing remarks, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. §103 (a).

Summary

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the

Appl. No. 10/816,016
Amdt. Dated June 28, 2006
Reply to Advisory Action of May 30, 2006

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